

R E M A R K S

Response to Rejection under 35 USC §103

The Examiner had rejected claims 1-12 as being obvious over Kinoshita US 6,388,651 in view of Yamazaki US 6,377,230 on the basis that Kinoshita discloses (a) using a processor for outputting different portions of an image (citing to col. 3, line 53 to col. 4, line 41) and (b) a printed circuit board having groups of wires (citing to Fig. 3 and col. 1, line 64 to col. 2 line 12 and col. 3, lines 7-27) for transporting respective portions of the image to the LCD.

The Examiner had originally conceded that Kinoshita failed to disclose simultaneous outputting of the image portions but offered Yamazaki to demonstrate simultaneous outputting of first and second image signals.

As to the Advisory Action of 08-16-07

In the Advisory Action of 08-16-07, the Examiner refused to retract the Section 103(a) rejection of claims 1-12, stating:

With respect to applicant's arguments in regards to where the prior art of Kinoshita and Yamazaki are not combinable . . . the combination is proper as the prior art Yamazaki enables a first image signal and a second image signal to be simultaneously outputted and further, reduces power consumption.

In maintaining the Section 103(a) rejection the Examiner has, in effect, urged an impossible combination in which a structure (Kinoshita)

that outputs different *sequential* images be combined with a structure (Yamazaki) that outputs different *simultaneous* images. This is clearly improper. As recently reviewed by the Supreme Court in KSR v. Teleflex, 127 S. Ct. 1727 (2007) the combination of prior art structures requires that, when combined each must function in its original capacity:

The principles underlying these cases are instructive when the question is whether a patent claiming the combination of elements of prior art is obvious. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. Sakraida and Anderson's—Black Rock are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. (Emphasis added).

Since the combination postulated by the Examiner would require the structures disclosed by Kinoshita and Yamazaki to operate other than according to their disclosed functions, the combination is improper.

As to Kinoshita

Kinoshita is directed to conserving power in an LCD display by dividing the image and sequentially operating the groups of image drivers so that they are not active at the same time, thereby reducing power. As succinctly set forth in Kinoshita at col. 5:

In addition, the first driver group 711 is driven in a different time slot of a horizontal scanning period from the time slot in which the second driver group 721 is driven in such a manner that at least while one group is being operated, the pixel data streams are stopped from being supplied to the other driver group. 35

This reduces the capacitive load on the gate-array control section G/A to half of that in the configuration of FIG. 1, which thereby decreases the electric power consumed by the output buffer of the gate-array control section G/A to about half, achieving less power consumption in the entire device. 40 According to the embodiment, an excellent display image was practically obtained in an XGA-type liquid crystal display of 21 inches.

The sequential operation of Kinoshita's mage drivers is shown by the waveforms of Fig. 4, at the right, while the simultaneous operation of applicants' image drivers is shown at the left:

b. As to Yamazaki

While the object of the Kinoshita disclosure is the saving of power in

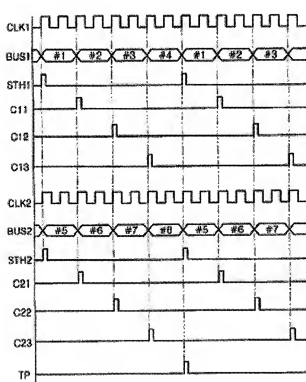


FIG. 4

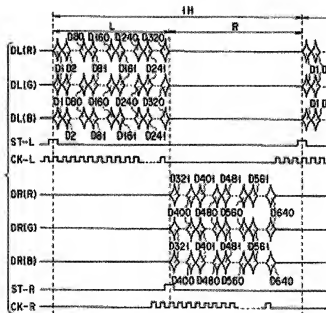


FIG. 4

an LCD by sequentially operating its image drivers, Yamazaki's object is to display *different* images to a *plurality* of viewers by time separating the two images. As Yamazaki states at col. 2, lines 24 – 34 and col. 3, lines 42 – 54) a plurality of images:

are divided with time are displayed is viewed intermittently
at a timing which is identical with a timing when dividing 45
the image with time, to thereby selectively recognize one of
said plurality of images.

In other words, in a state where an image A which is made
up of A_0, A_1, \dots , and an image B which is made up of B_0, B_1, \dots ,
are divided with time, as shown in FIG. 2, one 50
viewer is allowed to recognize the image A which is made
up of A_0, A_1, \dots , whereas another viewer is allowed to
recognize the image B which is made up of B_0, B_1, \dots ,
through an optical shutter.

That Yamazaki is directed to displaying different images to a plurality
of viewers is made clear by inspecting Yamazaki's Figs. 10 through and
13B:

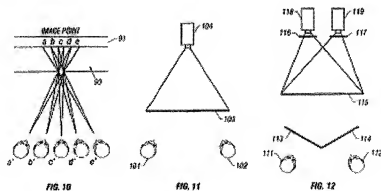




FIG. 13A



FIG. 13B

In Yamazaki Fig. 13A and Fig. 13B, what the first and second persons 111 and 112 of Figs. 10–12 watch simultaneously are *different* images. That is, the first person 111 watches the attacking person of FIG. 13B while the second person 112 watches the defending person of FIG. 13A. Therefore, in order to simultaneously display *different* images, signals corresponding to the *different* images are applied to the display circuits.

c. Can Kinoshita and Yamazaki be combined?

There is no question but that there is simply no possibility of combining a power conserving structure, such as Kinoshita's, which sequentially operates groups of image drivers to display a single image with a structure, such as Yamazaki's, for simultaneously displaying different images to a plurality of viewers. Moreover, there is no such suggestion,

motivation or inclination to be found in these references to experiment with modifications that would accomplish the Examiner's hind sight reconstruction. (Cf. MPEP 2143.01 "Suggestion or Motivation to modify the references")

d. Independent Claims 1 and 9 Are Distinguishable over the Art

Claim 1 clearly recites a signal processor for generating and outputting a first image signal, a second image signal and a driving control signal using an image data,

a data signal driver for generating and outputting a data signal from the first or second image signal and the source driving control signal all of which are input from said signal processor;

a printed circuit board having a plurality of wires for transmitting the signals and/or voltages of said signal processor to said data signal driver; a gate signal driver for generating and outputting a gate signal from the gate driving control signal of said signal processor; and

a liquid crystal display panel for displaying an image formed by receiving the data signal from said data signal driver and the gate signal from said gate signal driver,

wherein the plurality of wires comprises a first group of wires for transmitting the first image signal and a second group of wires for transmitting the second image signal, and the first group of wires are entirely spaced apart from the second group of wires, and two groups of the

data signal driver outputting simultaneously a data signal from the first image signal and the second image signal, one of which is the left-side of the signal processor and the other of which is the right-side of the processor.

Clearly the limitation in claim 1 of the data signal driver outputting *simultaneously* a data signal from the first image signal and the second image signal, one of which is the left-side of the signal processor and the other of which is the right-side of the processor is not suggested by the combination of Kinoshita and Yamazaki. Similar limitations are contained in claim 9.

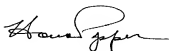
Allowable Subject Matter

The Examiner had indicated that Claims 15, 16, 24 and 25, objected to as being dependent upon a rejected base claim, would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if the 35 USC 112, First Paragraph can be overcome. The Section 112 objection has been overcome. However, in view of the discussion above, it does not seem necessary to amend claims 15, 16, 24 and 25.

CONCLUSION

In light of the amendment of claims 1 and the previous amendment of 9 and the arguments set forth above, Applicants requests that the rejections be withdraw and that the application be passed to issue with claims 1-29. The Director is hereby authorized to charge any deficiency in fees or credit any overpayment to Deposit Account No. 50-2257. Should Examiner desire to discuss the application, please contact the undersigned at (408) 392-9250.

Respectfully submitted,



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